

## **ABSTRACT**

A method for the preparation of a synthetic magnesium silicate having a crystal structure similar to natural hectorite, includes the steps of a) forming a precursor slurry, b) subjecting the precursor slurry to a continuous hydrothermal reaction in a pipe reactor at a temperature of from 210 °C to 400°C and under a pressure of at least 20 10 bar for 10 seconds to 4 hours, and e) washing and filtering to remove water soluble salts formed in the preparation of the precursor slurry. The precursor slurry is not washed and filtered before it is subjected to the continuous hydrothermal reaction.